

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (cancel)

2. (previously presented) A method for detecting the presence of microorganisms in a sample, comprising the step of:

131 (a) preparing a light-permeable microorganism colony culture medium mixed with a sample;

(b) illuminating said medium with coherent laser beam;

(c) receiving the light projection generated by said medium with image sensor;

the presence of microorganisms being detected by analyzing the projected image data obtained by said image sensor.

3. (previously presented) A projection detecting system comprising:

(a) a loading portion of a transparent nonflowing cell container which contains a microorganism colony under observation;

(b) a coherent laser beam emitting source which illuminates the object placed on said loading portion; and

(c) an image sensor which is an array of light sensitive detectors; arranged to receive light projection generated by said object illuminated by said laser beam and providing the projected image data corresponding to each detector.

4. (previously presented) The projection detecting system as described in claim 3 comprising:

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(a) multiple loading portions capable of accommodating many of said transparent nonflowing cell containers under observation in a row;

(b) a coherent laser beam emitting source which illuminates through said transparent nonflowing cell containers placed on said loading portion; and

(c) an image sensor which is an array of light sensitive detectors, arranged to receive the compounded light projection generated by said transparent nonflowing cell containers illuminated by said laser beam and providing the projected image data corresponding to each detector.

5. (previously presented) The projection detecting system as described in claim 3 comprising:

(a) a loading portion for a transparent nonflowing cell container which contains a microorganism colony under observation;

(b) three coherent laser beam emitting sources which illuminate said transparent nonflowing cell container placed on

said loading portion from X, Y and Z direction which are perpendicular to each other; and

(c) three image sensors which are an array of light sensitive detectors, arranged to receive the light projection generated by said object illuminated by said laser beams from X, Y and Z direction respectively and providing the projected image data corresponding to each detector as X, Y and Z image data.

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6. (currently amended) The projection detecting system as described in claim 3 comprising:

(a) a loading portion which holds ~~an object~~ a transparent nonflowing cell container which contains a microorganism colony under observation and is capable of rotating said object with constant angular velocity around center axis that passes through the center of said object;

(b) a coherent laser beam emitting source which illuminates from the direction perpendicular to the axis of rotation.

7. (cancel)
